

REMARKS

Claims 1 - 10 remain active in this application. No amendments have been made to the specification. Claims 1 and 7 have been amended to increase clarity. No new matter has been introduced into the application.

Claims 7 - 10 have been rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. This ground of rejection is respectfully traversed, particularly as being moot in view of the amendments made above.

While the Examiner is correct in noting that these claims are directed to a data format, it is respectfully submitted that the data format recited is not "abstract and sweeping" as the Examiner asserts. In fact, the claims are directed to a format (and not a method, much less a mental process, as the Examiner suggests) in which at least two pairs of bytes are present and where each of the pairs of bytes contains specific information in regard to the remainder of the data. This particular format is highly useful and supports the unexpected function of allowing avoidance or omission of certain testing of the data in order to determine how the data should be decoded. By allowing avoidance or omission of such testing by use of the claimed format, the number of memory accesses during decoding can be reduced by a factor of two to four.

It is well-established that an invention need not be tangible to fall within a statutory category of invention and that the form of a pattern may be statutory subject matter if it is useful. See, for example, *Ex parte Squires*, 133 USPQ 592 (Bd. of App., 1961) which, like the present invention, involved the patentability of the form of patterns for improving the conveyance of information. The invention is something made by man (See also *Diamond v. Diehr and Lutton*, 208 USPQ 1 (U. S. Sup. Ct., 1981) which also discusses the

decisions cited by the Examiner and distinguishes the case from those decisions on points applicable to the present circumstances: Gottschalk v. Benson being directed to application of a mathematical algorithm in the abstract for code conversion and In re Prater and Wei pointing out that a process claim, which the claims at issue clearly are not, but not a means-plus-function apparatus claim may fail under 35 U.S.C. §112 (not raised by the Examiner, rather than §101 at issue here) by comprehending mental steps and thus not limited to that which Applicant regards as the invention.) However, it is respectfully submitted that what is claimed as a data format is at least a "thing" (generally regarded as a "manufacture") *which is transformed from another state* since the same data can be expressed in other codes or formats which do not provide the useful, novel and unexpected meritorious effects of the claimed invention.

The present invention does not embody an algorithm or even rely on or embody a law of nature in the abstract or seek to pre-empt the same and is certainly not a mental process as the Examiner suggests. Even if the invention recited in claims 7 - 10 could be so characterized, it is respectfully submitted that, while any coding or decoding operation and many other patentable processes performed for which a computer is commonly applied can also be performed by hand, claims 7 - 10 recite a format of data which would facilitate decoding operations and produce its useful and meritorious effects *even if performed by hand*. Therefore, it is respectfully submitted that the subject matter of claims 7 - 10 is manifestly statutory subject matter under 35 U.S.C. §101 and therefore patentable subject to other provisions of 35 U.S.C. which have not been raised by the Examiner but, rather, grounds of rejection based on prior art have been withdrawn.

However, in an effort to satisfy the Examiner, claim 7 has been amended to provide a reference to a "block of encoded data" as the amount of data to which the claimed format applies and that the parameters of the data represented by the claimed pairs of bytes convey that representation "to a decoder". Therefore, the Examiner's assertion that the claims do not recite any machine or apparatus or any machine implemented steps is clearly untenable in view of the amendments made.

Accordingly, it is respectfully submitted that claims 7 - 10 are drawn to manifestly statutory subject matter and the Examiner's assertions are clearly in error and particularly untenable in view of the amendments made above. Therefore reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1 - 6 have again been rejected under 35 U.S.C. §102 as being anticipated by Wise et al. This ground of rejection is respectfully traversed for the reasons of record presented in the remarks appended to the response filed October 13, 2004, which are hereby fully incorporated by reference and the further remarks presented below, as well as being moot in view of the amendments to claim 1 made above.

The numerous differences between the claimed subject matter and Wise et al. were discussed in detail on pages 8 - 10 of the response filed October 13, 2004. It was pointed out that the "invention is directed to a data format using flags to indicate whether or not the block of intermediate data or the intermediate data for an entire frame has certain commonly occurring features which result from data compression which ordinarily (for example, under the JPEG standard) must be detected by testing of each pair of bytes (used for each AC coefficient) for non-zero value coefficients and/or whether or not extra bits are required for unique coding of coefficient values and other processing such

as loading (sixteen) zero-valued coefficients during decoding. By indicating either or both of these conditions on the compressed data with flag bits for each block or frame, such testing become unnecessary which reduces by a factor of two to four the number of memory read and write operations necessary to obtain the coefficient information from the compressed code (see page 14, lines 4 - 22) and reduces processing time sufficiently to allow other common operations such as rotation to be performed with practical levels of processing power." In this regard and on a very basic level, it can be seen that the present statement of the rejection effectively admits that the ground of rejection is in error by asserting that "Wise describes testing for coefficient values requiring more than eight bits to be uniquely coded and using a flag in at least one block of data to indicate if all the coefficient values are coded in eight bits or fewer..." (emphasis added) which is precisely the testing which the invention permits to be omitted while the Examiner's assertions concerning coefficient values and a flag indicating if *all such coefficient values in a block of data* are expressed in eight bits or fewer is incorrect.

Specifically, it was previously pointed out that the passage of column 40 relied upon by the Examiner is directed to the testing of token address fields rather than coefficient values and that the token address is coded in multiples of eight bits plus an extension bit *plus an extension bit* indicating whether or not the token address is complete in eight bits or if the following eight bits is an extension thereof which does not answer the recitation of a flag indicates coding of a coefficient value in *eight bits or fewer*. Further, in Wise et al., as previously pointed out, even if the extension bit is considered as a flag, *it is applied to each token address/eight-bit word and following eight*

bit word rather than being applied to the block of data as a whole and thus requires detection/testing for each eight-bit word (failing to provide the operational advantage of the invention) and, moreover, if applied to multiple coefficients in the block of data (which it is not), would increase the number of bits in the block compromising compression that is intended to reduce the number of bits in a block as well as compromising synchronism of data with eight bit bytes.

Therefore, it is seen that the teachings of Wise et al. are not even remotely applicable to the subject matter of claims 1 - 6, much less anticipating them and certainly would not support a conclusion of obviousness if modified to apply to coefficient values since they do not lead to an expectation of success in achieving the meritorious effects of the invention or otherwise provide evidence of a level of ordinary skill in the art which would support a conclusion of obviousness.

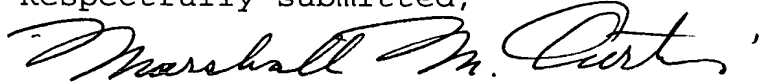
Further, it appears that the only way in which the Examiner's assertion in regard to a flag being applied to "all the coefficient values in the block" could be even colorably tenable (while ignoring the recitation of "coefficient values") would be in the trivial case of having only one coefficient value/token address per block; an interpretation which the Examiner does not mention. In any event, in an effort to satisfy the Examiner and more clearly indicate the clear error of the Examiner's position, claim 1 has been amended to refer in the preamble to "at least one block of data including a plurality of coefficient values". Thus, if the Examiner has made such a construction of the claims as speculated above, that construction has clearly been eliminated and the claims thus even more clearly and patentably distinguished from any possible construction of Wise et al. apparent to the undersigned in view of the paucity of the Examiners comments which in any case fail to make a *prima facie* showing of anticipation.

Accordingly, it is respectfully submitted that the rejection of claims 1 - 6 is clearly in error and untenable. Therefore, reconsideration and withdrawal; of the rejection of claims 1 - 6 is respectfully requested.

Since all rejections, objections and requirements contained in the outstanding official action have been fully answered and shown to be in error and/or inapplicable to the present claims, it is respectfully submitted that reconsideration is now in order under the provisions of 37 C.F.R. §1.111(b) and such reconsideration is respectfully requested. Upon reconsideration, it is also respectfully submitted that this application is in condition for allowance and such action is therefore respectfully requested.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Deposit Account No. 50-0563 of International Business Machines Corporation (Raliegh).

Respectfully submitted,



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